

0025303

United States Government

Department of Energy


Richland Operations Office

memorandum

DATE: DEC 01 1992
REPLY TO:
ATTN OF: OTD:RSO
SUBJECT: NATIONAL ENVIRONMENTAL POLICY ACT CATEGORICAL EXCLUSION DETERMINATION:
207-U RETENTION BASIN LINER INSTALLATION, 200 WEST AREA, HANFORD SITE,
RICHLAND, WASHINGTON
TO: C. M. Borgstrom, Director
Office of NEPA Oversight, EH-25, HQ

Using the authority delegated to me by the Assistant Secretary for Environmental Restoration and Waste Management (EM-1), I have determined that the subject proposed action fits within a Typical Class of Action currently available for Categorical Exclusion (CX) in Subpart D of the U. S. Department of Energy (DOE) National Environmental Policy Act (NEPA) Implementing Procedures.

The enclosed CX and its supporting Information Bulletin are provided for your review as required by DOE Order 5440.1D. Questions may be directed to me on (509) 376-7395, R. S. Ollero of the Operations and Transition Division on (509) 376-0663, or the DOE Richland Field Office NEPA Compliance Officer, P. F. X. Dunigan, Jr., on (509) 376-6667.


John D. Wagoner
Manager

Enclosures:

1. CX Determination
2. Information Bulletin

cc w/enc1s:

L. P. Duffy, EM-1
J. C. Tseng, EM-36
J. E. Lytle, EM-30
R. S. Scott, EM-20
D. Henninger, EM-331 (2 cys)
~~R. H. Engelmann, WHC~~
R. J. Bliss, WHC
M. H. Killinger, PNL (w/o encls)

RECEIVED
R. H. ENGELMAN

DEC 04 1992

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**CATEGORICAL EXCLUSION FOR
207-U RETENTION BASIN LINER INSTALLATION
200 WEST AREA, HANFORD SITE, RICHLAND, WASHINGTON**

Proposed Action:

The U.S. Department of Energy (DOE), Richland Field Office (RL) proposes to install a liner to the 207-U Basin.

Location of Action:

200 West Area, Hanford Site, Richland, Washington

Description of Proposed Action:

The proposed action is to install a new Polyvinyl-Chloride (PVC) or similar liner to the 207-U Retention Basin, which has been shown to leak. This action would entail installing a temporary bypass system to allow for draining of both halves of the basin and installing a PVC or similar liner to the basins and the outlet pipe. The proposed action would start as soon as the appropriate *National Environmental Policy Act (NEPA) of 1969* is approved. The total estimated cost of this project is under \$180,000 and would be sponsored under DOE's Office of Environmental Restoration and Waste Management.

Any nonradioactive waste that is generated from the proposed action would be disposed of in the Hanford Site Solid Waste Landfill, or other appropriate site according to all applicable federal and state laws and regulations and DOE orders.

Categorical Exclusion (CX) to be applied:

The following CX was listed in the Friday, April 24, 1992, "NEPA Implementing Procedures," published in the 57 Federal Register 15122:

- B1.6 "Installation or modification of retention tanks or small (normally under one acre) basins and associated piping and pumps for existing operations to control runoff or spills (such as under 40 CFR part 112). Modifications include, but are not limited to, installing liners or covers."

This CX is appropriate because the action would not have a significant effect on the human environment, and meets the conditions for the CXs: does not have extraordinary circumstances; is not connected to other action with potentially significant impacts; is not precluded by 40 Code of Federal Regulations (CFR) 1506.1 or 10 CFR 1021.211; does not threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety and health, including DOE Orders; does not require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; does not disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum or natural gas products that preexist in the environment causing uncontrolled or unpermitted releases; does not adversely impact environmentally sensitive resources, such as historic properties, cultural resources, threatened or endangered species, and floodplains and wetlands. In addition, the action appears to fit under the appropriate CX for

modification, specifically installing lining, of small (under one acre) retention basins. Documentation for the project indicating satisfaction of the conditions of this CX will be retained by RL.

I have reviewed the documentation and do not object to the use of these CX.

Signature: Paul F. X. Dunigan, Jr.
Paul F. X. Dunigan, Jr.
RL NEPA Compliance Officer

Compliance Action:

I have determined that the proposed actions meet the requirements for the CXs referenced above. Therefore, I have determined, using authority delegated to me by the Assistant Secretary of the Office of Environmental Restoration and Waste Management, EM-1, that the proposed actions may be categorically excluded from further NEPA review and documentation.

Signature: John B. Wagoner 12/1/92
John B. Wagoner, Manager
Richland Field Office
Date

EH-25 has reviewed this determination* and has no objection.

Signature: _____
Carol M. Borgstrom, Director
Office of NEPA Oversight, EH-25
Date

* 207-U Retention Basin Liner Installation

INFORMATION BULLETIN

PROPOSED ACTION: 207-U RETENTION BASIN LINER INSTALLATION, 200 WEST AREA, HANFORD SITE, RICHLAND, WASHINGTON

DESCRIPTION OF PROPOSED ACTION

The proposed action would install a plastic liner to the 207-U Retention Basin which is presently constructed with concrete. A liner is necessary to prevent cooling water and process steam condensate, both wastes of the Uranium Oxide (UO₃) Plant, from leaking into the soil column. The basin, which is divided into a south and north half, is located approximately 500 yards (457 meters) to the west of the U Plant.

Water loss was discovered to occur in the south half of the basin following a flow diversion which diverted discharges to the north section. Approximately 67,000 gallons (253,621 liters) of water was lost before the remaining water was discharged leaving the south half drained. Under current conditions, there is a discharge of approximately 100 gallons per minute (378 liters per minute) to the 207-U Basin system. A minimum of one half of the full potential is needed to support the stabilization run of the UO₃ Plant. The discharge expected from the final run is 750 gallons per minute (2840 liters per minute) or less. This UO₃ Plant stabilization run is scheduled to occur in mid December of Fiscal Year 1993.

The overall capacity of the basin is one million gallons, however, the working level, the maximum amount which would need to be retained, is one quarter of a million gallons. The surface area for both the south and north half is 13,924 square feet (1,294 square meters) each.

The proposed project would entail several actions. A PVC liner, or similar equivalent, would be applied to the entire basin and affixed with fasteners around the perimeter of the basin. In addition to the basin, the existing outlet pipe would be sealed with the liner to prevent leakage at the connection. The other activity would be the installation of a bypass system of Polyvinyl-Chloride (PVC) pipe that would run from the inlet area to the outlet structure to allow for the draining of both halves of the basin.

While it is anticipated that the basin would be ready to perform it's intended function at the time of the last UO₃ Plant run, a bypass system may be installed to route discharges from the plant directly to the discharge ditch as a contingency. This system would consist primarily of ten inch PVC pipe and would route the discharge from the inlet directly to the sump on the outlet side.

The proposed action would commence as soon as the appropriate National Environmental Policy Act (NEPA) documentation is approved. This work, which is sponsored by the Environmental Restoration and Waste Management Program, is estimated to cost less than the \$180,000 allocated for this action.

IMPACTS

The following checklist summarizes environmental impacts that were considered for the proposed action for both installation and operation. All "YES" answers are explained in detail in the text following the checklist.

IMPACT TO THE AIR

Would the proposed action:		YES	NO
1	Result in gaseous discharges to the environment?	X	
2	Release particulates or drops to the atmosphere?	X	
3	Result in thermal discharges to the environment?	X	
4	Violate federal, state, or local emission standards?		X
5	Cause any other atmospheric disturbance?		X
6	Violate ambient air quality standards (e.g., CO, NO ₂)?		X
7	Increase offsite radiation dose to >0.1 mrem (40 CFR 61 Subpart H)?		X

IMPACT TO WATER

Would the proposed action:		YES	NO
8	Discharge any liquids to the environment?		X
9	Discharge heat to surface or subsurface water?		X
10	Alter stream flow rates?		X
11	Significantly alter natural evaporation rates?		X
12	Release soluble solids to natural waters?		X
13	Provide interconnection between aquifers?		X
14	Require installation of wells?		X
15	Require a Spill Control and Prevention Plan?		X
16	Violate water quality standards (COD, BOD, pH etc.)?		X

IMPACT TO LAND

Would the proposed action:		YES	NO
17	Conflict with existing zoning or land use?		X
18	Be located on wetlands?		X
19	Be located on the 100-year floodplain?		X
20	Generate non-hazardous solid waste?	X	
21	Create hazardous, radioactive, PCB, or asbestos waste?		X
22	Cause erosion?		X
23	Impact prime or unique farmland?		X
24	Be located on the Arid Land Ecology Reserve?		X
25	Require an excavation permit?		X
26	Disturb an undeveloped area?		X

GENERAL

Would the proposed action:		YES	NO
27	Increase noise level?	X	
28	Adversely impact sensitive species or critical habitat?		X
29	Be within the Hanford Reach Study Area?		X
30	Make a long-term commitment of nonrenewable resources?	X	
31	Require new utilities or modifications to utilities?		X
32	Use pesticides, carcinogens, or toxic chemicals?		X
33	Require a Radiation Work Permit?	X	
34	Increase offsite radiation dose?		X
35	Adversely affect archaeological or historical property?		X

The proposed action would result in gaseous discharges to the environment in the form of exhaust emissions created by machinery and vehicles needed to perform the work.

Particulate releases, notably dust particles, might be generated as a result of certain operations. However, due to the seasonal weather conditions, this amount is not expected to contribute significantly to overall Hanford Site particulate releases.

Minor amounts of thermal releases would be expected from the proposed action, but, again, would not represent a significant increase in sitewide discharges.

There is expected to be a minor amount of solid waste created during this project. This waste would be disposed of in the Hanford Site Solid Waste Landfill or other appropriate disposal site in accordance with contractor administrative controls, and applicable federal and state regulations and guidelines.

Noise levels would rise as a result of construction activities, but would return to present levels when the project is complete.

The use of certain materials, PVC piping and the basin liner, represent a minor long-term commitment on nonrenewable resources.

A radiation work permit would be required as the basin is located in a Surface Contamination Area.

NEPA REVIEW

The Westinghouse Hanford Company NEPA Documentation Function has reviewed this proposed action for the appropriate NEPA documentation, and believes that this action might be covered under a Categorical Exclusion (CX) as defined in Subpart D of the DOE NEPA Implementing Procedures. The CX for installation and operation of telecommunication activities is included below for DOE review and determination:

B1.6 "Installation or modification of retention tanks or small (normally under one acre) basins and associated piping and pumps for existing operations to control runoff or spills (such as under 40 CFR part 112). Modifications include, but are not limited to, installing liners or covers."

ELIGIBILITY CRITERIA

The proposed action meets the eligibility criteria of 10 Code of Federal Regulations (CFR) 1021.410(b) in that there are no "extraordinary circumstances" that may affect the significance of the environmental effects of the proposal. Further, the proposed action is not connected to another action with potentially significant impacts, or with cumulatively significant impacts, and is not precluded by 10 CFR 1021.211. The "Integral Elements" of Appendix B, are satisfied as discussed following:

INTEGRAL ELEMENTS 10 CFR 1021, APPENDIX B, SUBPART D	
Would the Proposed Action:	Comment or explanation:
Threaten a violation of environmental, safety or health laws, regulations, or DOE Orders?	No laws, regulations, or orders would be violated by the proposed action.
Require siting, construction or major expansion of waste treatment, storage, or disposal facilities?	Any waste created would not require an expansion of any waste disposal facility.
Disturb hazardous substances preexisting in the environment, allowing uncontrolled releases?	The project would not disturb preexisting hazardous substances.
Adversely affect archeological or historical property?	The proposed action would not disturb any known archaeological or historical sites.
Adversely affect Federally- or state listed, proposed or candidate, threatened or endangered species or habitat?	All work would take place within a previously disturbed area and would not impact critical habitat or sensitive species.
Adversely affect floodplains or wetlands?	The proposed action would not take place in a floodplain or wetland.
Adversely affect wild and scenic rivers, state or Federal wildlife refuges or specially designated areas?	The proposed action would not take place in a specially designated area.
Affect special sources of water?	No special sources of water would be affected.

The proposed action fulfills all the conditions of Subpart D CX B1.6 for the modification of small retention basins. The proposed action would affect a retention basin under one acre in size and relining is specifically allowed under the CX cited above.

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author

Addressee

Correspondence No.

J. D. Wagoner, RL

C. M. Borgstrom, DOE-HQ

INCOMING: 9208781

Subject: NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) CATEGORICAL EXCLUSION (CX)
DETERMINATION: 207-U RETENTION BASIN LINER INSTALLATION, 200 WEST
AREA, HANFORD SITE, RICHLAND, WASHINGTON

INTERNAL DISTRIBUTION

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		C. J. Furubotten	R3-35	X
		R. H. Engelmann	H6-26	X
		G. W. Jackson, Assignee	H6-20	
		H. E. McGuire, Level 1	B3-63	
		W. J. Rued	H6-26	X
		D. J. Washenfelter	S6-18	X
		EDMC	H6-08	X

